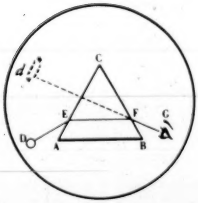

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3.20.25.10. General Theory of Electronic Structure, Electronic Transitions, and Chemical Binding

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3.30. MACROMOLECULES AND POLYMERS

3.30.20. Molecular Structure of Macromolecules and Polymers

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3.40. PHYSICAL CHEMISTRY

3.40.10. Chemical Kinetics

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4.20. STRUCTURE AND PROPERTIES OF FLUIDS

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4.20.35. Thermodynamic Properties of Fluids

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4.20.65.15. Optical Constants

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4.30. PLASMA PHYSICS

4.30.10. Elementary Processes in Plasmas

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4.30.20. Basic Properties of Plasmas

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4.30.70.20. Glow and Corona

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5.10. CRYSTALLOGRAPHY AND STRUCTURAL CONFIGURATION OF SOLIDS

5.10.20. Structural Symmetries and Crystal Morphology

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5.10.30. Crystal Defects

5.10.30.30. Annealing

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5.10.30.50. Color Centers

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5.20. ENERGY STATES IN SOLIDS

5.20.10. General Band–Theory Models and Computational Techniques

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5.20.20.15. Metals and Semimetals

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5.20.25. Localized Electron States and Other Electronic Theories or Models

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5.20.30. Impurity and Defect Levels and Positron States

5.20.30.40. Ionic Crystals

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5.20.40. Level Splitting and Interactions in Crystals

5.20.40.15. Crystal and Ligand Fields

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5.20.50.10. Excitons

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5.20.50.20. Polarons

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5.20.80. Electronic Surface States and Energy Band Structure

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5.30. THERMAL AND THERMODYNAMIC PHENOMENA

5.30.40. Phase Properties of Systems

5.30.40.20. Critical–Point Phenomena

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5.30.40.30. Structural Transformation (e.g. Polymorphic, Martensitic, etc.)

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5.55. MAGNETIC RESONANCE AND RELAXATION

5.55.20. Paramagnetic Resonances (e.g. EPR, ESR) and Relaxation

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5.60. OPTICAL PROPERTIES OF SOLIDS

5.60.20. Optical Constants of Materials and Optical Parameters

5.60.20.20. Optical Constants of Metals and Semimetals

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5.60.45.10. General Theory and Measurement Techniques

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5.60.70.20. Photoluminescence, Fluorescence and Phosphorescence

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5.80. PHYSICS OF SURFACES, THIN FILMS, INTERFACES AND SMALL PARTICLES

5.80.10. Structural Properties of Surfaces, Thin Films, Interfaces, Whiskers and Dendrites

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6.30.20. Propagation and Transmission in Homogeneous and Isotropic Media

6.30.20.10. General

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6.30.50.10. General Theory and Experiments on Laser and Maser Action

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6.30.60.10. General

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6.30.70. Optical Information Theory and Image Processing

6.30.70.20. Fourier Transform Optics

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